

FORM PTO-1390 (Modified) U.S. PATENT AND TRADEMARK OFFICE; U.S. DEPARTMENT OF COMMERCE
(REV. 7-2005)

ATTORNEY'S DOCKET NUMBER

SUN-0151

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (If known) See 37 CFR 1.5
107570229

NYA

INTERNATIONAL APPLICATION NO.
PCT/KR2003/002118INTERNATIONAL FILING DATE
14 October 2003PRIORITY DATE CLAIMED
N/A**TITLE OF INVENTION****PRINTED CIRCUIT BOARD INSPECTION SYSTEM COMBINING X-RAY INSPECTION AND VISUAL INSPECTION****APPLICANT(S) FOR DO/EO/US**

Jong-Won KIM, Dong-Hyun LEE, Seong-Cheol HONG

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. This is a **FIRST** submission of items concerning a submission under 35 U.S.C. 371.
2. This is a **SECOND** or **SUBSEQUENT** submission of items concerning a submission under 35 U.S.C. 371.
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (24) indicated below.
4. The US has been elected (Article 31).
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. is attached hereto (required only if not communicated by the International Bureau).
 - b. has been communicated by the International Bureau.
 - c. is not required, as the application was filed in the United States Receiving Office (RO/US).
6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. is attached hereto.
 - b. has been previously submitted under 35 U.S.C. 154(d)(4).
7. Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. are attached hereto (required only if not communicated by the International Bureau).
 - b. have been communicated by the International Bureau.
 - c. have not been made; however, the time limit for making such amendments has NOT expired.
 - d. have not been made and will not be made.
8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).
11. A copy of the International Preliminary Examination Report (PCT/IPEA/409).
12. A copy of the International Search Report (PCT/ISA/210).

Items 13 to 23 below concern document(s) or information included:

13. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
14. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
15. A **FIRST** preliminary amendment.
16. A **SECOND** or **SUBSEQUENT** preliminary amendment.
17. A substitute specification.
18. A power of attorney and/or change of address letter.
19. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 - 1.825.
20. A second copy of the published International Application under 35 U.S.C. 154(d)(4).
21. A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
22. Express Mail Label No. **EV748033038US**

IAP20 Rec'd PCT/PTO 13 APR 2006

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

U.S. APPLICATION NO (if known, see 37 CFR 1.5) 10/576229	INTERNATIONAL APPLICATION NO. PCT/KR2003/002118	ATTORNEY'S DOCKET NUMBER SUN-0151																																																																																																				
23. Other items or information:																																																																																																						
<p>The following fees have been submitted:</p> <table border="1"> <tr> <td>24. <input checked="" type="checkbox"/> Basic national fee</td> <td>\$300</td> <td>CALCULATIONS</td> <td>PTO USE</td> </tr> <tr> <td>25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....</td> <td>\$0</td> <td>\$200.00</td> <td></td> </tr> <tr> <td>All other situations.....</td> <td>\$200</td> <td></td> <td></td> </tr> <tr> <td>26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)....</td> <td>\$0</td> <td></td> <td></td> </tr> <tr> <td>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority.....</td> <td>\$100</td> <td>\$500.00</td> <td></td> </tr> <tr> <td>International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB.....</td> <td>\$400</td> <td></td> <td></td> </tr> <tr> <td>All other situations.....</td> <td>\$500</td> <td></td> <td></td> </tr> <tr> <td colspan="2">TOTAL OF 24, 25 and 26 =</td> <td>\$</td> <td>\$1,000.00</td> </tr> <tr> <td colspan="4"> <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof. </td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td>Number of each additional 50 or fraction thereof (round up to a whole)</td> <td>RATE</td> </tr> <tr> <td>22 - 100 =</td> <td>0 /50 =</td> <td>0</td> <td>x \$250.00</td> </tr> <tr> <td colspan="4">Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> </tr> <tr> <td>CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td>RATE</td> </tr> <tr> <td>Total claims</td> <td>4 - 20 =</td> <td>0</td> <td>x \$50.00</td> </tr> <tr> <td>Independent claims</td> <td>1 - 3 =</td> <td>0</td> <td>x \$200.00</td> </tr> <tr> <td colspan="2">MULTIPLE DEPENDENT CLAIMS (if applicable)</td> <td><input type="checkbox"/></td> <td>+ \$360.00</td> </tr> <tr> <td colspan="4">TOTAL OF ABOVE CALCULATIONS =</td> </tr> <tr> <td colspan="4"> <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. </td> </tr> <tr> <td colspan="4">SUBTOTAL =</td> </tr> <tr> <td colspan="4">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).</td> </tr> <tr> <td colspan="4">TOTAL NATIONAL FEE =</td> </tr> <tr> <td colspan="4">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +</td> </tr> <tr> <td colspan="4">TOTAL FEES ENCLOSED =</td> </tr> <tr> <td colspan="3">Amount to be</td> <td>\$</td> </tr> <tr> <td colspan="3">Amount to be</td> <td>\$</td> </tr> </table>			24. <input checked="" type="checkbox"/> Basic national fee	\$300	CALCULATIONS	PTO USE	25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....	\$0	\$200.00		All other situations.....	\$200			26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)....	\$0			Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority.....	\$100	\$500.00		International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB.....	\$400			All other situations.....	\$500			TOTAL OF 24, 25 and 26 =		\$	\$1,000.00	<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.				Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE	22 - 100 =	0 /50 =	0	x \$250.00	Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).				CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	Total claims	4 - 20 =	0	x \$50.00	Independent claims	1 - 3 =	0	x \$200.00	MULTIPLE DEPENDENT CLAIMS (if applicable)		<input type="checkbox"/>	+ \$360.00	TOTAL OF ABOVE CALCULATIONS =				<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.				SUBTOTAL =				Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).				TOTAL NATIONAL FEE =				Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +				TOTAL FEES ENCLOSED =				Amount to be			\$	Amount to be			\$
24. <input checked="" type="checkbox"/> Basic national fee	\$300	CALCULATIONS	PTO USE																																																																																																			
25. <input checked="" type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4).....	\$0	\$200.00																																																																																																				
All other situations.....	\$200																																																																																																					
26. <input checked="" type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)....	\$0																																																																																																					
Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the as an International Searching Authority.....	\$100	\$500.00																																																																																																				
International Search Report prepared by an ISA other than the US and provided to the previously communicated to the US by the IB.....	\$400																																																																																																					
All other situations.....	\$500																																																																																																					
TOTAL OF 24, 25 and 26 =		\$	\$1,000.00																																																																																																			
<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.																																																																																																						
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole)	RATE																																																																																																			
22 - 100 =	0 /50 =	0	x \$250.00																																																																																																			
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).																																																																																																						
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE																																																																																																			
Total claims	4 - 20 =	0	x \$50.00																																																																																																			
Independent claims	1 - 3 =	0	x \$200.00																																																																																																			
MULTIPLE DEPENDENT CLAIMS (if applicable)		<input type="checkbox"/>	+ \$360.00																																																																																																			
TOTAL OF ABOVE CALCULATIONS =																																																																																																						
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2.																																																																																																						
SUBTOTAL =																																																																																																						
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).																																																																																																						
TOTAL NATIONAL FEE =																																																																																																						
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40 per property +																																																																																																						
TOTAL FEES ENCLOSED =																																																																																																						
Amount to be			\$																																																																																																			
Amount to be			\$																																																																																																			

10/576229

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

JAP20 Rec'd PCT/P10 13 APR 2006

- a. A check in the amount of \$ _____ to cover the above fees is enclosed.
- b. Please charge my Deposit Account No. 06-1130 in the amount of \$ \$500.00 to cover the above fees. A duplicate copy of this sheet is enclosed.
- c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-1130. A duplicate copy of this sheet is enclosed.
- d. Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Cantor Colburn LLP
55 Griffin Road South
Bloomfield, CT 06002
Telephone No. 860-286-2929
Facsimile No. 860-286-0115

Amy Bizon-Copp

SIGNATURE

Amy Bizon-Copp

NAME

53,993

REGISTRATION NUMBER

April 13, 2006

DATE

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): Jong-Won KIM, et al.

Docket No.

SUN-0151

Application No.
10/576229Filing Date
04/13/2006Examiner
NYACustomer No.
23413Group Art Unit
NYAInvention: **PRINTED CIRCUIT BOARD INSPECTION SYSTEM COMBINING X-RAY INSPECTION AND VISUAL INSPECTION**

I hereby certify that the following correspondence:

Transmittal Letter To The United States Designated/Elected Office (DO/EO/US) Concerning A Submission Under 35 U.S.C. 371, PCT Application, Decl/POA, Assig w/Reocrdation Form Cover sheet, IDS, Form PTO-1449 w/Ten (10) cited references, Auth to debit and/or cr Deposit Acct. No. 06-1130-Filing Fee-\$500.00 - \$40 (Small Entity) and Postcard Receipt

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on

April 13, 2006

(Date)

Paula Currie

(Typed or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

EV748033038US

("Express Mail" Mailing Label Number)

Note: Each paper must have its own certificate of mailing.